

## ABSTRACT

An electrical feedback detection system for detecting electrical contact between a multi-point probe and an electrically conducting material test sample surface. The electrical feedback detection system comprises an electrical detector unit connected to a multitude of electrodes in the multi-point probe, and optionally directly to the test sample surface. The detector unit provides an electrical signal to a multi-point testing apparatus, which can be used to determine if the multi-point probe is in electrical contact with the test sample surface. The detector unit comprises an electrical generator means for generating an electrical signal that is driven through a first multitude of electrodes of the multi-point probe, and a second multitude of switched impedance detection elements. The electrical potential across the impedance detection elements determines the electrical contact to the test sample surface.